

Training and Certification of Energy Professionals in Sub-Saharan Africa

AEE is global, we bring it local.







The AEE's Certified Carbon Reduction Manager (CRM®) program is designed to provide recognition for professionals who have distinguished themselves as leaders in the growing field of carbon reduction.

This CRM® course is designed to provide internationally recognised comprehensive training in the critical areas of greenhouse gas (GHG) emissions, carbon reduction and associated reporting. The focused, fast-paced program is presented over 3 days and is intended both to expand your knowledge in the carbon management field and to serve as a preparatory vehicle for the exam which is required to achieve the AEE's CRM® certification. The examination is taken on the 4th day and is voluntary.

The AEE's widely respected CRM® training and certification program was launched in 2008. The course is now presented on 4 continents, and the certification has gained broad acceptance in the United States and the international arena. The CRM® exam and course materials have recently been updated to reflect the very latest in carbon trends, reporting protocols and guidance documents.

Concepts that will be presented include carbon auditing; emissions reporting and verification; emissions conversions; renewable energy sources and green power; energy efficiency technologies; fleet management; emissions trading; recycling and water; financing and marketing to maximize project success, and much more.

TRAINING PROGRAMME OUTLINE

- Introduction, executive briefing & high-level strategies
- Introduction to carbon emissions management (why you may need to report GHGs)
- Carbon footprint measurement & monitoring (practical methods to report GHGs)
- Practical application
- Practical strategies & tactics to reduce your carbon footprint and environmental impact
- Discussion of class exercise
- Carbon credits, GHG trading and new revenue tactics
- Financing / selling / approving your program

COURSE OUTCOMES

On completion of the CRM® course you will be able to immediately

implement practical strategies & tactics to reduce your carbon footprint and environmental impact. On obtaining certification with the AEE you will be one of thousands of distinguished professionals in the international energy engineering fraternity.

DELEGATE PROFILE

This program is designed to help energy-, facility- and business professionals become more adept and skilful in identifying and implementing effective carbon reduction strategies.

Those who can benefit from this course include:

- Facility-, Energy and Environmental Managers
- **Environmental Engineering Specialist**
- Corporate Sustainability Manager
- Directors of Energy
- **Energy Engineers**
- Consultants
- Contractors
- Plant Engineers
- Energy Service Professionals
- Utility Professionals
- **VPs of Operations**

BASIC SKILLS REQUIRED

The CRM training course is at a level which assumes the delegate has basic problem-solving skills, including quick and accurate use of a hand calculator, the ability to use basic algebra and financial competency to solve problem solution expressions and calculations from a written problem statement.

EXAMINATION

The examination and certification process is optional and you may take the course without it as well. The examination is typically held on the morning of day 4, or at any other AEE examination day. Examination questions are based on concepts and experiences contained within this program material. The exam, which must be completed within 4-hours, is open book, with a mixture of multiple choice and true/false questions.

This is a voluntary exam and delegates must book for the examination and submit a certification application form before taking the exam. The examination may only be taken after completion of the prescribed AEE CRM® training at a licensed AEE training provider.

Note that exam results will only be issued once candidate is in good standing with EnTF.

ELIGIBILITY FOR CERTIFICATION

The prerequisites to qualify for the certification process have been designed to take into account the possible diversity of education and practical experience an individual may have. However, each CRM® candidate must attend the CRM® training programme, pass the written CRM® 4-hour examination with marks of 70% or more, and meet one of the following criteria:

Education and Experience:

- A 4-year engineering or architectural degree, or a registered Professional Engineer (P.E.), or Registered Architect (R.A.) – within South Africa a PrEng, PrArch
- A 4-year business or related degree, with at least 3 years' experience in energy or carbon management.
- A 2-year associate / technical degree within South Africa PrTechniEng, PAT - with 5+ years' experience in energy or carbon management.
- 8+ years or more verified experience in energy or carbon management.
- Re-certification is required every 3 years subject to participation in the AEE continuing education program (CEP).
- *Related experience in energy engineering or energy management.
- **Please Note: Verification of employment must be submitted.

If you do not meet one of the eligibility criteria above, you can still apply for the In-Training certification, CRM-IT. In order to gain the in-training certification, you must attend a CRM preparatory training course or obtain a degree from an approved training

provider, submit the CRM-IT certification application, and pass the international CRM examination. The CRM-IT certification is valid for six years, which allows you time to meet the full CRM certification eligibility requirements.

STEPS TO CERTIFICATION

- 1. Register to attend the AEE training course with a licensed training provider of the AEE.
- 2. Register to sit the AEE examination complete the certification application and return it to the Certification Coordinator at the EnTF.
- 3. Attend 85% or more in-class training.
- 4. Pass the examination with 70% or more.
- 5. Your examination mark and certification application will be reviewed by the AEE African Certification Board for your applied certification.
- 6. Your application with African Board recommendations will be submitted to AEE's International Certification Board for approval.
- 7. Should you receive feedback that you may only receive 'intraining' status, you may upgrade to full certification status once you have achieved sufficient levels of experience, and as long as this is within 6 years.
- 8. You will receive notification for renewal on a 3 yearly basis.

RECOGNITION

Engineering Council of South Africa (ECSA)

Pending Continuing Professional Development (CPD) credits for ECSA registration for attending the training course.

additional CPD credit for ECSA registration for passing the international AEE examination.

Association of Energy Engineers (AEE)

4 credits for Continuing Professional Competency (CPC) demonstration to re-certify on another AEE certification program.

International certification with the AEE

International AEE certification will be listed in the AEE Professionals Directory on-line, once approved by AEE.

Attendance certificate

Attendance certificate will be issued to all delegates that attend the full duration of the training course. (85% or higher attendance required.)

BOOKINGS

Book online at www.energytrainingfoundation.co.za for your training and examination. You will receive confirmation from the Training Administrator with all the necessary arrangements and information.

* Terms and Conditions

- 1. First paid first served policy applies for booking security
- 2. Booking security requires the following to be received six (6) working days prior to the commencement of the course:
- a. Full payment cleared in bank with proof of payment supplied.
- b. A deposit of 25% with proof of payment supplied.
- c. A purchase order for the full amount of the invoice.
- 3. Fees include coffee/tea/juice on arrival, mid-morning coffee/tea with pastries, mid-afternoon coffee/tea with biscuits, and lunch. For training the fee includes the black and white text books, course fee and one year membership of
- the SAEEC. For examinations the fee includes the examination fee, marking fee, certification application fee, and 1 year membership of AEE for first certifications.
- 4. It is the responsibility of the candidate attending the course to arrange their own travel, accommodation, breakfast and dinner.
- 5. Policy on international candidates
- a. Invoices exclude withholding and country-specific taxes. Should these be leveraged by your country government, we reserve the right to invoice the responsible entity/person to recoup the costs.
- b. VAT is payable for candidates attending training in South African borders, this may be claimed on

- departure from South Africa using the tax invoice.
- 6. Policy on cancellations a. Cancellations received within five
- (5) working days prior to the first day of training will carry a 25% cancellation fee. No course material will be supplied. For examinations a rescheduling fee of R650.00 will be leveraged.
- b. Cancellations received six (6) working days prior to the first day of training will receive a full refund.
- 7. Policy on accounts not in good standing
- a. The candidate in attendance at the course ultimately remains responsible for payment of the outstanding account and providing the proof of payment thereof.
- b. In the event that a candidate, or the

- candidate's organisation is not in good standing with us we reserve the right to withhold:
- · Certificates of Attendance
- · Course Attendance Registers
- · Issuing of ECSA CPD credits
- · Examination Results
- · AEE Certification Application and/or Renewal Submissions AEE Certification Certificates
- Listing on the AEE website
- 8. The Energy Training Foundation (EnTF) is a division of Energy Cybernetics (Pty) Ltd, an EOH company, and the invoice will be made out by Energy Cybernetics.
- Proforma invoices will be supplied, Tax Invoices will be raised on request but these are payable within 30 days of issue.
- 10. Right of Admission Reserved.

About the Energy Training Foundation

The EnTF offers tailor-made training courses to fulfil the energy training needs of the industrial, commercial, mining, government, utility, building sector of Africa. EnTF is the sole approved training partner of the AEE for the Southern African region and Indian Ocean Islands, the training partner of the SAEEC and the AEPEA, is an EWSETA accredited training provider, with course accreditation for CPD registration requirements with ECSA.

Programs offered by EnTF include customised training programs, mentorship and stipend management programs, locally developed training and internationally accredited certification programs. The most popular: Certified Energy Manager (CEM), Certified Energy Auditor (CEA), Certified Measurement and Verification Professional (CMVP), Certified Water Efficiency Professional (CWEP), Certified Renewable Energy Professional (REP), Certified Business Energy Professional (BEP), Certified Carbon Reduction Manager (CRM), Fundamentals of Energy Management (FEMT), Basic Principles of Energy (BPE), Measurement and Verification Standard Training (MVST), Nelson Mandela University PV Technologies short learning program (PVTECH), UNIDO end user and expert level training, Solar PV Installer GreenCard training.